Appendix 2: Goals and Objectives

1. Promote improved assessment and treatment of PTSD

The National Center for PTSD's highest priority is supporting VA clinicians and veterans through the development of evidence-based treatments for PTSD and the dissemination of best-practices through the VA system. Developing effective PTSD *treatments* has a direct effect on patient care. Cognitive behavioral treatment (CBT) has been shown to be the most effective treatment for PTSD. The National Center is the leader in evaluating CBT treatments for veterans. VA Cooperative studies #420 and #494 are the two largest PTSD psychotherapy studies ever carried out. CSP #420 compared two group treatments among 360 male Vietnam veterans. CSP #494 is the first VA Cooperative Study to focus exclusively on women. It randomized 284 women to one of two treatments. A new multi-site study (CSP #504) will investigate how pharmacological agents administered in combination will improve the efficacy of agents administered alone. This is particularly important for VA since many veterans are already prescribed one or more medications. In other recent studies of the treatment of PTSD in veterans, Center investigators have evaluated Cognitive Processing Therapy, guanfacine, and Seeking Safety, a treatment for PTSD and comorbid substance abuse.

In addition, the National Center was integrally involved in the development of the VA/DoD Best Practice Guidelines for PTSD. (For information on dissemination of these guidelines, see #**3** below).

Assessment enhances diagnostic precision and provides clinicians with a method to monitor the outcomes of patients they are treating. The National Center has created the most widely used diagnostic instruments in the field of PTSD. For example, the Clinician Administered PTSD Scale (CAPS), which has become the gold standard in PTSD assessment. In addition to utilization of such instruments for clinical care or research, they have potential utility for making accurate diagnostic assessments during compensation and pension exams. Building on the Center's expertise in assessment, the Center produced *The Best Practice Manual for PTSD Compensation and Pension Examinations*.

Detecting and treating PTSD in a primary care setting has been another focus. The Center has created a number of products to assist VA clinicians in this area. The 4-item Primary Care PTSD Screen has been adopted by VA to screen veterans annually for PTSD in the primary care setting. The Center also produced a PTSD manual for use in primary care as part of the Veterans Health Initiative. Recently, Center investigators submitted an HSR&D proposal to investigate integrated primary and behavioral PTSD treatment in VISN 17.

Since all psychiatric assessment currently relies on self-report, the National Center has set a high priority on developing psychophysiological and psychobiological procedures to improve diagnostic precision. Despite some promising findings, none of these measures

are ready for clinical use; therefore they are described in more detail under Objective **2.** Below.

2. Advance the scientific understanding of PTSD

The key to the development of better treatment is an informed understanding of the etiology, pathophysiology, and psychology of PTSD. The National Center's entire basic research portfolio is dedicated to this objective. The ultimate goal, of course, it to translate such scientific knowledge into improved diagnosis and treatment of PTSD.

The Center is credited with some of the most significant psychobiological findings in the field of PTSD. The Center was first to identify a structural brain abnormality (e.g., reduced hippocampal volume) in PTSD. Using fMRI, PET, and SPECT technologies, the Center also discovered functional abnormalities in brain mechanisms, increased amygdala and reduced prefrontal cortical activation in those with PTSD. In addition, there is excessive adrenergic and reduced GABAergic activity in key brain nuclei of people with PTSD. Genetic research currently seeks to identify genetic polymorphisms related to vulnerability and resilience among military and civilian population exposed to extreme stress.

Research on resilience shows neurohormonal reactions (e.g., mobilization of neuropeptide Y) among military Special Forces troops that may help us understand why some people are more resistant to the adverse psychological impact of extreme stress. The Center has established a Resilience Laboratory to continue this groundbreaking work to identify the genetic, biological, psychological, and social factors related to resilience and vulnerability to stress. An important current initiative in the laboratory is the development of a resilience scale that will permit a standardized assessment of key factors.

In addition to biological investigations, the Center's basic research program has explored a wide spectrum of domains. These include: psychophysiological reactivity (VA Cooperative Study #334); cognitive and emotional changes associated with PTSD; and war-zone risk factors associated with coping and adaptation. Many studies have investigated gender differences with regard to traumatic exposure and psychiatric morbidity. The Sleep Laboratory has explored the mechanisms underlying sleep abnormalities associated with PTSD. Center investigators ranked among the first to identify PTSD as a risk factor for physical illness.

Finally the National Center also has been asked, on occasion, to implement studies that have policy implications. Two such investigations were: a survey of World War II veterans who participated in our nation's mustard gas trials, and an epidemiological survey of the prevalence of PTSD among American Indian and Asian/Pacific Islander veterans.

3. Advance PTSD education for clinicians, researchers, and veterans through development and dissemination of information

Translating knowledge into practice is the purpose of the Center's education activities. The foremost concern of the Center is to get the most up-to-date, evidence-based information on causes, assessment, and treatment of traumatic stress disorders into the hands of practitioners who are working with America's veterans. To get the word out, the National Center has been quick to capitalize on new communication technologies as they become available. The Center put the PILOTS (Published International Literature on Traumatic Stress) database online in 1991 allowing clinicians, researchers, and the veterans themselves to access the most extensive published literature on traumatic stress. PILOTS has emerged as the largest and best bibliographic database of its kind. It now contains more than 28,0000 citations and continues to grow on a daily basis.

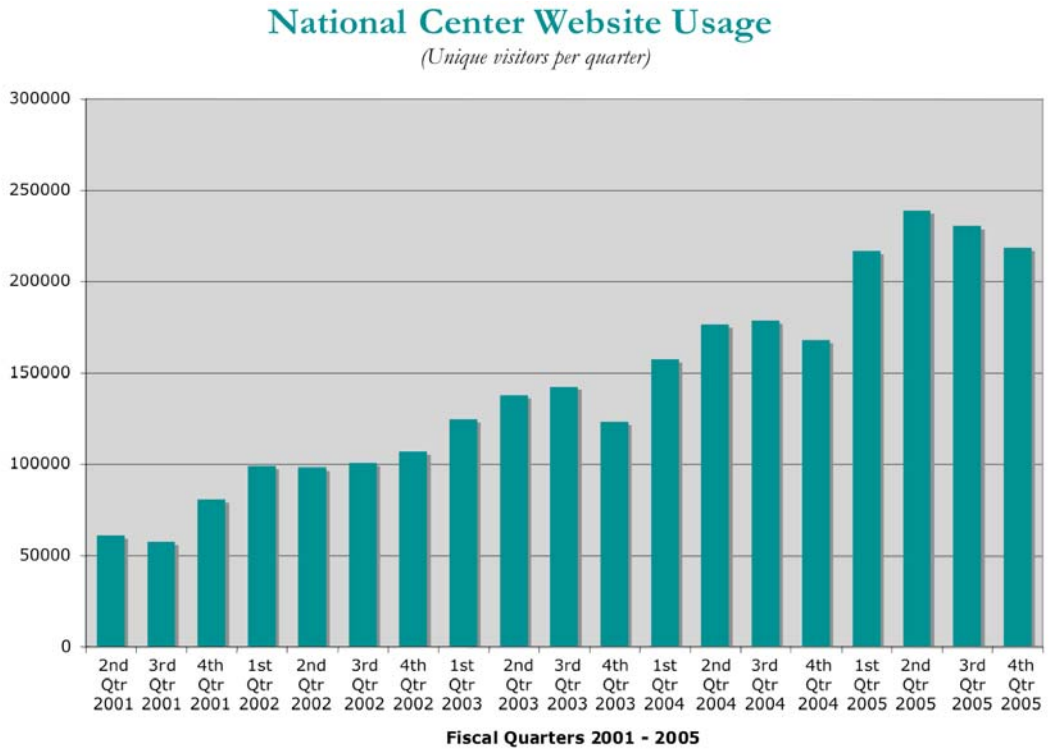
In 1995, the Center established an extensive website (www.ncptsd.va.gov) with materials that are geared specifically for clinicians as well as veterans, family members, researchers, policy makers, and the media. Use of the Center's website has grown dramatically in recent years, largely in response to world events.

- Traffic to the site has risen from approximately 20,000 users per month before the terrorist attacks of September 11, 2001 to over 80,000 during some months during FY 2005.
- Over the fiscal year, there were more than 900,000 unique visitors to the website, up by one-third from the previous year.
- In total, the website currently contains more than 1,600 documents, 140 fact sheets, 600 downloadable articles, and 9 videos, including a speech by the Surgeon General and a series of expert lectures on PTSD.

It has also served as a primary vehicle for disseminating our *Iraq War Clinician Guide* and *Psychological First Aid Manual* (see below).

Educational materials are routinely offered online, on CD-ROM, and on video and DVD, ensuring the broadest possible dissemination of information to the vast array of people who can put it to use. In addition to the website and PILOTS database, some of the Center's education activities include:

- *NCPTSD Research Quarterly*, a guide to the scientific literature on traumatic stress and PTSD
- Clinical Training Program, a week-long program on PTSD assessment and treatment for VA healthcare staff and other professionals
- PTSD Knowledge Management, the National Center is participating in VA's Best Practices initiatives to develop a knowledge management system implementing evidence based PTSD treatment
- PTSD 101, a comprehensive web-based PTSD training program that should be completed by the end of this fiscal year
- Award winning series of ethnocultural videos for mental health providers, primary care providers, and veterans
- Science into Practice, which provides clinicians with summaries of clinically relevant articles
- Telehealth initiatives, to provide training and consultation to clinicians who cannot commute to trainings



4. Support the global war on terrorism through collaborations with the Department of Defense (DoD)

There are many ongoing collaborative activities between the National Center for PTSD and different DoD components. At last count we were actively collaborating with 15 Army, Navy, Marine, and Air Force facilities, and in a close working relationship with the Uniformed Services University of Health Sciences in Bethesda, MD. These efforts are geared to promote pre-deployment resilience and post-deployment readjustment among OIF/OEF troops, to provide training on evidence-based PTSD treatments for DoD and VA practitioners, to provide joint VA/DoD research initiatives, and to develop joint VA/DoD training and education activities.

Production of the *Iraq War Clinician Guide*, written with colleagues from Walter Reed Army Medical Center, was a significant accomplishment. Now in its second edition, it has served as the best single source of information to help VA and DoD clinicians meet the unique challenges of providing optimal care to OIF/OEF veterans. The *Guide* was posted on our website and downloaded over 8,000 times in the past fiscal year. It covers general topics such as assessment and treatment, and special topics such as the treatment of amputees, treatment in the primary care setting, military sexual trauma, traumatic grief, substance abuse, family issues, and caring for clinicians who treat traumatically injured patients.

The Center is also involved in collaborative research with DoD. For example:

- A project at Ft. Bragg is investigating the biological and social factors that distinguish resilient troops from others under high stress conditions
- The Parris Island Attrition Study has shown that Marine recruits who had been sexually or physically traumatized prior to enlistment were 1.5 times more likely to drop out of recruit training
- A project with over 1,700 troops deployed to Kosovo, in conjunction with the Walter Reed Army Institute of Research showed that Critical Incident Stress Debriefing provided no benefit with regard to PTSD, depression, well-being, and other factors. This study will be repeated with OIF troops.

There are a number of research projects focused on OIF/OEF veterans:

- A prospective study of over 1,500 troops deployed from Ft. Hood and Ft. Lewis is using pre- post-deployment assessment of neuropsychological and psychological outcomes. The study, which also will follow several hundred guard and reserve troops, is a joint effort by the Army, VA, and VISN 16 MIRECC.
- DE-STRESS, a brief Internet intervention for PTSD, is currently being tested at Walter Reed Army Medical Center.
- Functional brain imaging, psychophysiological, neurohormonal, and genetic assessment is being carried out at Ft. Drum.
- A medication trial with selective serotonin reuptake inhibitors is also being conducted at Ft. Drum.

5. Advance VA's emergency medical response capability

The National Center for PTSD has a long history of helping VA respond in times of national emergency. This began following the 1989 Loma Prieta, CA earthquake that occurred six weeks after the Center was established, and continues to date, including response to Hurricane Katrina this past year. Early efforts included a two-day disaster training for VA audiences, offered in partnership with Readjustment Counseling Services, as well as a *Disaster Mental Health Manual*. In the past five years the National Center entered into a multi-year interagency agreement with the Substance Abuse and Mental Health Services Administration's (SAMHSA) Center for Mental Health Services to develop best practices after disaster. With SAMHSA's support, the National Center for PTSD and the National Center for Child Traumatic Stress developed a structured, manualized approach to immediate, postdisaster mental health intervention called Psychological First Aid. Within the first month after Hurricane Katrina, the *Psychological First Aid Manual* had been downloaded from the National Center's website almost 4,000 times by clinicians, educators, disaster-relief personnel and volunteers, clergy, and others. National Center personnel also provided training, both on-site and via conference calls, to mental health care providers from the VA and many other agencies. (It should be emphasized that all research and educational initiatives that focus on civilians rather than veterans or military personnel, are funded entirely out of non-VA funds).

Some of the Center's other disaster projects include:

- 6 fact sheets for the Public Health Strategic Health Care Group for a packet distributed after Hurricane Katrina by VHA on Veterans' Health Needs Assessment and VA Clinicians Encounter Information
- Case studies of SAMHSA's crisis counseling programs following the Oklahoma City bombing, the September 11th 2001 terrorist attacks, and other state crisis counseling programs
- An evaluation toolkit for use by all federally funded crisis counseling programs.
- Responsibility for implementing the multi-state evaluation of the Katrina crisis counseling grants
- An evidence-informed CBT intervention for postdisaster distress

Another important achievement in the area of emergency management was a consensus conference held in October 2001 that was planned by DoD, the National Center for PTSD, and National Institute of Mental Health. That conference, entitled "Early Intervention Following Mass Casualties," has been updated in a newly published book, "Intervention's Following Mass Violence and Disasters."

6. Provide consultation to VA's top management and other agencies on a continuing basis and during national emergencies

As experts in the field of PTSD, Center staff frequently consult with VA leadership on issues relevant to traumatic stress and PTSD. These consultations happen through intensive, long-lasting relationships with VA leadership and informal one-to-one conversations with clinicians and researchers. Among several recent examples, National Center leaders provided Congressional Testimony on VA's capacity to serve returning

Iraq veterans and are consulting with top VA leadership on best practice assessments for compensation and pension PTSD evaluations.

One of the mechanisms for ongoing consultation is through high-level representation on VA committees. National Center staff serve on a number of VA committees, including:

- Undersecretary for Health's Special Committee on PTSD
- Knowledge Management and Best Practices
- Office of Mental Health Services' Field Advisory and New Knowledge Committees
- VA Mental Health Subcommittee on Preparing VA for Weapons of Mass Destruction
- Post-deployment Mental Health Workgroup
- ORD's Women's Health Research Strategic Planning Task Force
- National Military Sexual Trauma Workgroup
- VA National Women Veterans Mental Health Committee.
- National Women Veterans Health Program's Special Committee on Women Veterans Returning from OIF/OEF
- My HealtheVet Mental Health Subcommittee

Other consultation on clinical, research, or education is periodically provided to NIH, SAMHSA, DoD, CDC and the Institute of Medicine (IOM). As a recent example, several National Center leaders were invited to present to the IOM on PTSD diagnosis, treatment, and issues related to the compensation and pension process for evaluating VA disability claims.